

AMENDMENTS TO THE CLAIMS

Claim 1 (currently amended): A semiconductor device having
a surface, comprising:

~~characterized by having boron, carbon and nitrogen as main
components, and a coating to which sulfur has been added serves
as surface protection and covers at least part of a surface~~

a coating disposed on said semiconductor device surface to
cover at least a portion thereof, said coating including boron,
carbon, nitrogen and sulfur.

Claim 2 (currently amended): The semiconductor device of
Claim 1, ~~characterized in that~~ wherein a carbon composition
ratio (atomic ratio) of the coating is at least 0.1.

Claim 3 (currently amended): The semiconductor device of
~~one of Claim 1 and Claim 2, characterized in that oxygen is
included in the coating~~ wherein said coating includes oxygen.

Claim 4 (currently amended): The semiconductor device of
~~any one of Claims 1 to 3~~ Claim 1, further includes ~~characterized~~
~~by having~~ a multi-layer structure with a heterogeneous film
attached to the coating.

Claim 5 (currently amended): The semiconductor device of
~~any one of Claims 1 to 4~~ Claim 4, characterized in that the

wherein said heterogeneous film contains an amount of structural elements different ~~to~~ than the coating.

Claim 6 (currently amended): The semiconductor device of ~~any one of Claims 1 to 4~~ Claim 4, ~~characterized in that the~~ wherein said heterogeneous film is a film with main components identical to the coating, without sulfur being added thereto.

Claim 7 (currently amended): The semiconductor device of ~~any one of Claims 1 to 4~~ Claim 4, ~~characterized in that the~~ wherein said heterogeneous film is a film with silicon as a main component.

Claim 8 (currently amended): The semiconductor device of ~~any one of Claims 1 to 7~~ Claim 1, ~~characterized by having~~ further includes a III-V compound semiconductor.

Claim 9 (currently amended): The semiconductor device of ~~any one of Claims 1 to 8~~ Claim 8, ~~characterized in that the~~ wherein said semiconductor is a field effect transistor.

Claim 10 (currently amended): The semiconductor device of ~~any one of Claims 1 to 9~~ Claim 8, ~~characterized in that the~~ wherein said semiconductor is a bipolar transistor.

Claim 11 (currently amended): The semiconductor device of ~~any one of Claims 1 to 8~~ Claim 8, ~~characterized in that the~~ wherein said semiconductor is a diode.

Claim 12 (currently amended): A semiconductor device
fabrication method, ~~characterized by~~ said method comprising the
steps of:

5 disposing a film formation substrate in a plasma atmosphere
containing nitrogen[[],]; and

supplying boron atoms, carbon atoms and sulfur atoms to the
film formation substrate[[],] ~~and forming~~ to thereby form a
boron carbon nitride film ~~to which sulfur has been added~~ having
sulfur as an additive thereto.

Claim 13 (currently amended): A semiconductor device
fabrication method, ~~characterized by~~ said method comprising the
steps of:

5 disposing a film formation substrate facing a boron nitride
sputter portion[[],]; and

supplying carbon atoms and sulfur atoms to the film
formation substrate[[],] ~~and forming~~ to thereby form a boron
carbon nitride film ~~to which sulfur has been added~~ having sulfur
as an additive thereto.

Claim 14 (currently amended): A semiconductor device
fabrication method, ~~characterized by~~ said method comprising the
steps of:

disposing a film formation substrate facing a boron nitride
5 and carbon sputter portion[[,]]; and

supplying sulfur atoms to the film formation substrate[[,]]
~~and forming to thereby form~~ a boron carbon nitride film ~~to which~~
~~sulfur has been added~~ having sulfur as an additive thereto.

Claim 15 (currently amended): A semiconductor device
fabrication method, ~~characterized by~~ said method comprising the
steps of:

disposing a film formation substrate facing a boron nitride
5 laser abrasion[[,]]; and

supplying plasma containing carbon atoms and sulfur atoms
to the film formation substrate[[,]] ~~and forming to thereby form~~
a boron carbon nitride film ~~to which sulfur has been added~~
having sulfur as an additive thereto.

Claim 16 (currently amended): A semiconductor device
fabrication method, ~~characterized by~~ said method comprising the
steps of:

disposing a film formation substrate facing a boron nitride
5 and carbon laser abrasion[[,]]; and

supplying plasma containing sulfur atoms to the film
formation substrate[[,]] ~~and forming to thereby form~~ a boron

carbon nitride film ~~to which sulfur has been added~~ having sulfur as an additive thereto.

Claim 17 (original): The semiconductor device fabrication method of any one of Claims 12 to 16, characterized in that the semiconductor is a field effect transistor.

Claim 18 (original): The semiconductor device fabrication method of any one of Claims 12 to 16, characterized in that the semiconductor is a bipolar transistor.

Claim 19 (original): The semiconductor device fabrication method of any one of Claims 12 to 16, characterized in that the semiconductor is a diode.

Claim 20 (currently amended): A communication system device, ~~characterized by having the semiconductor device of any one of Claims 1 to 11~~ comprising:

a semiconductor device having a surface; and

5 a coating disposed on said semiconductor device surface to cover at least a portion thereof, said coating including boron, carbon, nitrogen and sulfur.